

ABSTRACT OF THE DISCLOSURE

A process for removing thiothionylfluoride from a composition containing sulfur tetrafluoride and thiothionylfluoride includes contacting the composition with a high surface area material, such as activated carbon. The process can provide purified sulfur tetrafluoride
5 free of thiothionylfluoride. The high surface area material can be replaced for further processing. Alternatively, the material can be regenerated by contacting it with a gas mixture of oxygen and nitrogen at 150-450°C and converting the adsorbed elemental sulfur to sulfur dioxide without oxidation of the material.

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